Laboratory Analytical Report

12 August 2013

Mr. Robert Keyes Associated Environmental Industries Corp. P.O. Box 5300 Norman, OK 73070

WO: E3H0130 RE: Webb City, OK



4619 N. Santa Fe
Oklahoma City, OK 73118
405.488.2400 Phone
405.488.2404 Fax
www.etilab.com

Enclosed are the results of analyses for samples received by the laboratory on 08/08/13 10:51. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Russell Britten

President



Associated Environmental Industries Corp. Project: Webb City, OK P.O. Box 5300 Project Number: No Project

P.O. Box 5300 Project Number: No Project Number: No Project Number
Norman OK, 73070 Project Manager: Mr. Robert Keyes 08/12/13 15:26

MW20

E3H0130-01 (Aqueous)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
Environmental Testing Inc.												
Conventional Chemistry Parameters by Standard Methods												
Total Alkalinity	2130	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B				
Total Dissolved Solids	2910	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C				
Anions by EPA Method 300.0												
Chloride	551	80.0	mg/L	500	EBH0199	LSB	08/10/13 18:33	EPA 300.0				

Environmental Testing Inc.

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MW21 E3H0130-02 (Aqueous)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes				
	Environmental Testing Inc.												
Conventional Chemistry Parameters by Standard Methods													
Total Alkalinity	310	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B					
Total Dissolved Solids	5310	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C					
Anions by EPA Method 300.0													
Chloride	2510	320	mg/L	2000	EBH0199	LSB	08/10/13 00:12	EPA 300.0					

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MW22 E3H0130-03 (Aqueous)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes				
,	resure	reporting Limit	CING	2.nation	Daten	. mary st	1 mary 20d	tillou	110103				
		Envi	ronmental To	esting Inc	c .								
Conventional Chemistry Parameters by Standard Methods													
Total Alkalinity	455	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B					
Total Dissolved Solids	1710	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C					
Anions by EPA Method 300.0													
Chloride	768	80.0	mg/L	500	EBH0199	LSB	08/10/13 00:28	EPA 300.0					

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MW23 E3H0130-04 (Aqueous)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
Environmental Testing Inc.												
Conventional Chemistry Parameters	by Standard	Methods										
Total Alkalinity	385	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B				
Total Dissolved Solids	2490	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C				
Anions by EPA Method 300.0												
Chloride	1080	80.0	mg/L	500	EBH0199	LSB	08/10/13 00:45	EPA 300.0				

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MW24 E3H0130-05 (Aqueous)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes				
	Environmental Testing Inc.												
Conventional Chemistry Parameters	by Standard	Methods											
Total Alkalinity	1290	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B					
Total Dissolved Solids	1550	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C					
Anions by EPA Method 300.0													
Chloride	191	160	mg/L	1000	EBH0199	LSB	08/10/13 01:01	EPA 300.0					

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MW25 E3H0130-06 (Aqueous)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
Environmental Testing Inc.												
Conventional Chemistry Parameters by Standard Methods												
Total Alkalinity	1870	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B				
Total Dissolved Solids	2730	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C				
Anions by EPA Method 300.0												
Chloride	504	320	mg/L	2000	EBH0199	LSB	08/10/13 01:17	EPA 300.0				

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Chloride

Anions by EPA Method 300.0

4619 N. Santa Fe Oklahoma City, OK 73118 405.488.2400 Phone 405.488.2404 Fax www.etilab.com

Reported:

EPA 300.0

Project: Webb City, OK Associated Environmental Industries Corp. Project Number: No Project P.O. Box 5300

1830

160

Norman OK, 73070 Project Manager: Mr. Robert Keyes 08/12/13 15:26

MW26 E3H0130-07 (Aqueous)

Analyte	Result	Reporting Limit	Units onmental T	Dilution	Batch	Analyst	Analyzed	Method	Notes
Conventional Chemistry Parameter	s by Standard	l Methods							
Total Alkalinity	300	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B	
Total Dissolved Solids	3210	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C	

1000

EBH0199

mg/L

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LSB

08/10/13 01:33



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MW27 E3H0130-08 (Aqueous)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
		Envi	uonmontol T	astina In								
Environmental Testing Inc.												
Conventional Chemistry Parameter	s by Standard	Methods										
Total Alkalinity	364	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B				
Total Dissolved Solids	7320	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C				
Anions by EPA Method 300.0												
Chloride	3670	800	mg/L	5000	EBH0199	LSB	08/10/13 01:50	EPA 300.0				

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MW28 E3H0130-09 (Aqueous)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes

Environmental Testing Inc.

Conventional Chemistry Parameters	Conventional Chemistry Parameters by Standard Methods											
Total Alkalinity	3250	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B				
Total Dissolved Solids	10600	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C				
Anions by EPA Method 300.0												
Chloride	3840	800	mg/L	5000	EBH0199	LSB	08/10/13 02:06	EPA 300.0				

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MW29

E3H0130-10 (Aqueous)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
		Envir	onmental T	esting Inc	c .							
Conventional Chemistry Parameters by Standard Methods												
Total Alkalinity	1990	20.0	mgCaCO3/L	1	EBH0193	DMB	08/09/13 08:50	SM 2320B				
Total Dissolved Solids	2390	50.0	mg/L	1	EBH0217	DMB	08/12/13 12:10	SM 2540C				
Anions by EPA Method 300.0												
Chloride	181	32.0	mg/L	200	EBH0199	LSB	08/10/13 18:49	EPA 300.0				

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Conventional Chemistry Parameters by Standard Methods - Quality Control Environmental Testing Inc.

				Spike	Source		%REC		RPD	
Analyte	Result	Reporting Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EBH0193 - General Prep - Wet Ch	nem (Aq)									
Duplicate (EBH0193-DUP1)		Source: E3H010	08-01	Prepared &	Analyzed:	08/09/13				
Total Alkalinity	50.0	20.0	mgCaCO3/L		50.0			0	20	
Batch EBH0217 - General Prep - Wet Ch Blank (EBH0217-BLK1)	nem (Aq)			Prepared: 0	08/09/13 Aı	nalyzed: 08/	/12/13			
Total Dissolved Solids	<50.0	50.0	mg/L	*		•				
LCS (EBH0217-BS1)				Prepared: 0	08/09/13 A	nalyzed: 08/	/12/13			
Total Dissolved Solids	1000	50.0	mg/L	1000		100	80-120			
Duplicate (EBH0217-DUP1)		Source: E3H013	30-01	Prepared: 0	08/09/13 A	nalyzed: 08/	/12/13			
Total Dissolved Solids	2830	50.0	mg/L	·	2910			3	20	

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Anions by EPA Method 300.0 - Quality Control

Environmental Testing Inc.

				Spike	Source		%REC		RPD			
Analyte	Result	Reporting Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes		
Batch EBH0199 - General Prep - Wet Chem (Aq)												
Blank (EBH0199-BLK1)				Prepared & Analyzed: 08/09/13								
Chloride	< 0.160	0.160	mg/L									
LCS (EBH0199-BS1)				Prepared & Analyzed: 08/09/13								
Chloride	0.593	0.160	mg/L	0.600		99	80-120					
Matrix Spike (EBH0199-MS1)	Source: E3H0130-01RE1		Prepared & Analyzed: 08/09/13									
Chloride	3610	800	mg/L	3000	644	99	75-125					
Matrix Spike Dup (EBH0199-MSD1)	rix Spike Dup (EBH0199-MSD1) Source: E3H0130-01RE1		Prepared & Analyzed: 08/09/13									
Chloride	3580	800	mg/L	3000	644	98	75-125	0.7	20			

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Non-Certified Analyses included in this Report

Analyte

Certifications

Code	Description	Number	Expires
KDHE	Kansas Accredited	E-10401	01/31/2014
NELAP	NELAP Accredited	10002	06/30/2014
ODEQ	Oklahoma Accredited	2012-154	08/31/2013
TCEQ	Texas Accredited	T104704498-13-3	03/31/2014

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Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

x Non-Certified analyte

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CHAIN OF CUSTODY RECORD



F039.008

Sample/Cooler Receipt Form

San	pple Series # <u>E3 H0 130</u>		
1.	Were samples received on ice?	YES	NO
2.	Temperature of representative sample or temperature blank 36 °C		
3.	If the temperature is $\leq 0^{\circ}\text{C}$, was the representative sample or temp blank frozen?	YES	NO NA
4.	Did all containers arrive in good condition (unbroken)?	YES	NO
5.	Were VOA vials received?	YES	NO
	a. Was there any observable headspace present in any VOA vial?	YES	NO NA
6.	Were the correct containers used for the analysis requested?	YES	NO
7.	Was there sufficient amount of sample to perform the requested tests in each container?	YES	NO
8.	Were the samples received with sufficient time left to meet holding time requirements?	YES	NO
9.	On preserved containers, did pH strips suggest preservation reached the correct pH level? (DO NOT OPEN VOA VIALS TO CHECK pH)	YES	NO NA
	Acid Preserved ≤2 Other Base Preserved ≥12 Other		
10.	Did the containers indicate the correct preservatives were used for the requested analysis?	YES	NO NA
11.	Were chain-of-custody forms properly filled out (conforms to ETI Sample Acceptance Policy)?	YES	NO
12.	If samples were not in compliance, was the client notified of the nonconformity?	YES	Date:
	a. If yes, does the client wish to proceed with analysis?	YES	NO
13.	Was the client notified of the intent to subcontract work that will NOT be performed by ETI?	YES	Date:
Pre	servative ID(s),,,,		
I ce	rtify that all of the above checks were completed. (Initial)		
	rtify the project was entered into the LIMS, and a label with the unique LIMS number was attached tial)	to each	container.
Not	res:		
	nort and Assembanuing Data Pouloused but		